

Town Center Traffic Capacity Analysis

1. Overview of Study
2. Land Use Assumptions / Scenarios (Sept. 20)
3. Study Methodology
4. Existing Conditions
5. Baseline Future Conditions
6. Town Center Development Scenarios
7. Next Steps

**Town Center
Transportation Study**

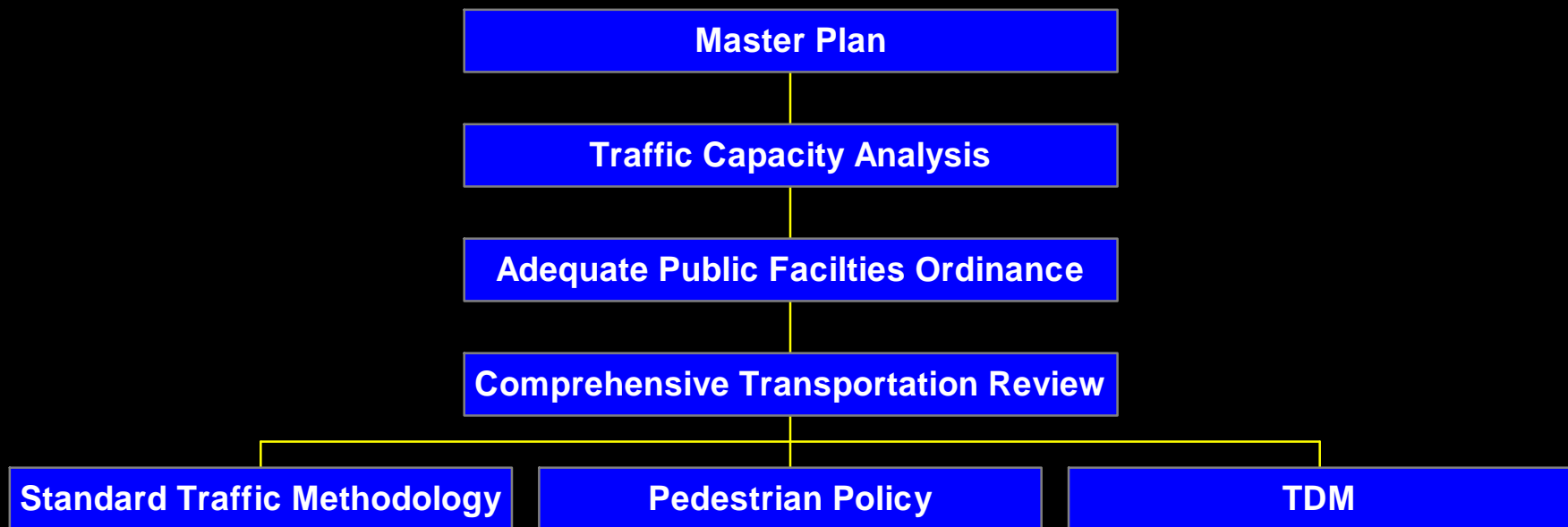
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graph TD; A[Town Center Transportation Study] --- B[Capacity Analysis]; A --- C[Traffic Calming]; A --- D["Pedestrian / Bike Safety Shuttle Service"]
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Capacity Analysis

Traffic Calming

**Pedestrian / Bike Safety
Shuttle Service**

Implement Goals / Guidance in the Master Plan



Land Use Scenarios

Town Center Traffic Capacity Analysis

- Existing Conditions
- Baseline (Pipeline)
- Three Town Center Scenarios



Study Methodology

- Traffic Generation
- Performance Measures
- Traffic Analysis Tools

Trip Generation Totals for Each Scenario

Scenario	Total AM Peak	Total PM Peak
Scenario 1	5559	7116
Scenario 2	5150	6679
Scenario 3	6448	8030

Performance Measures

- Intersections
 - Peak Hour Congestion
 - Delay
- Roadways
 - Travel Time
 - Delay

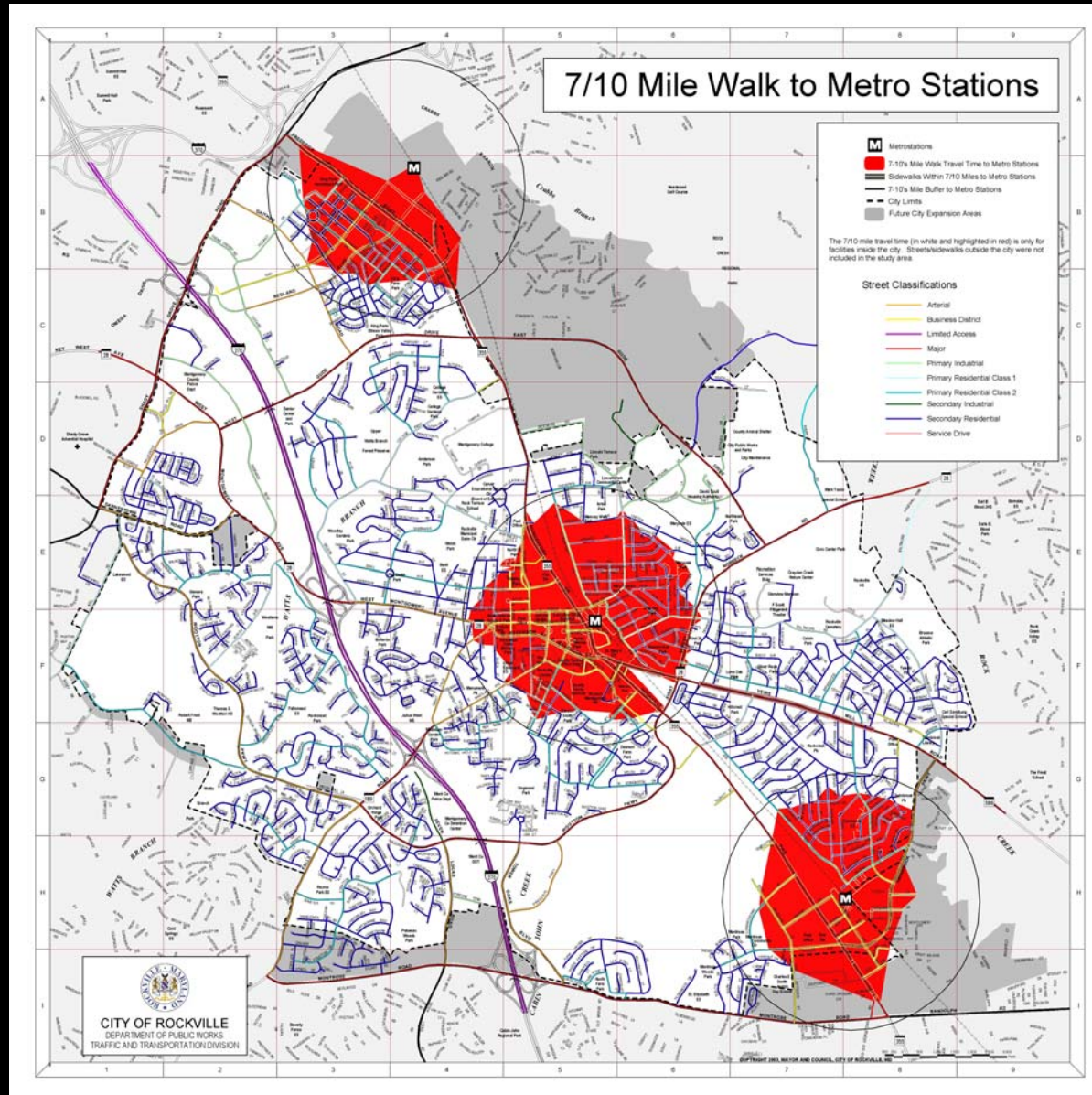
Traffic Analysis Tools


- Planning Analysis
- Computer Simulation
 - Output Measures or Performance Measures
 - Graphical Output

Level of Service at Signalized Intersections

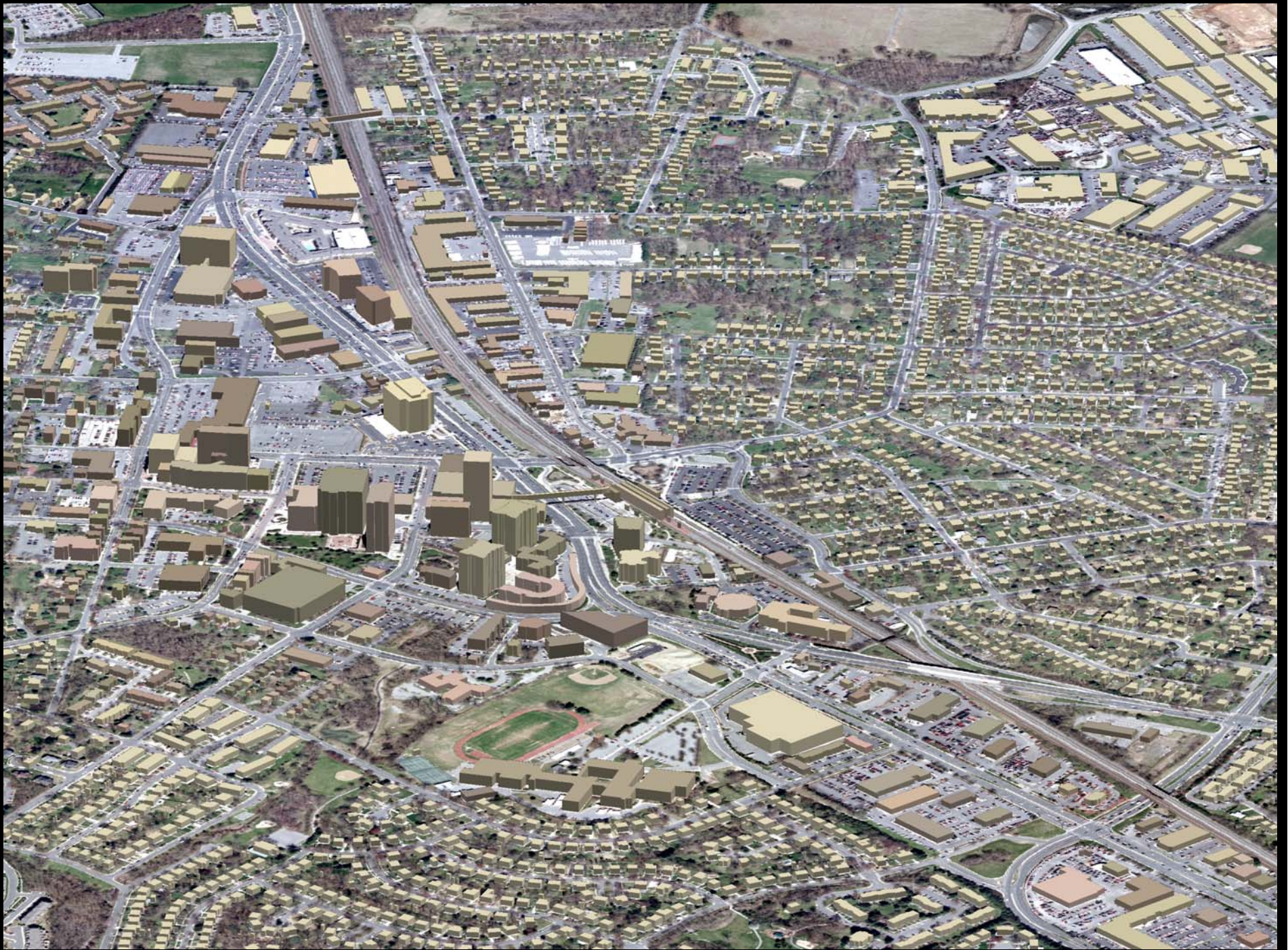
Signalized Intersections		
Level of Service (LOS)	Control Delay (seconds)	Description
A	≤ 10.0	Free Flow/Insignificant Delays
B	10.1 - 20.0	Stable Operation/Minimal Delays
C	20.1 - 35.0	Stable Operation/Acceptable Delays
D	35.1 - 55.0	Approaching Unstable/Tolerable Delays
E	55.1 - 80.0	Unstable Operation/Significant Delays
F	≥ 80.0	Forced Flow/Excessive Delays

Transit-Oriented Areas

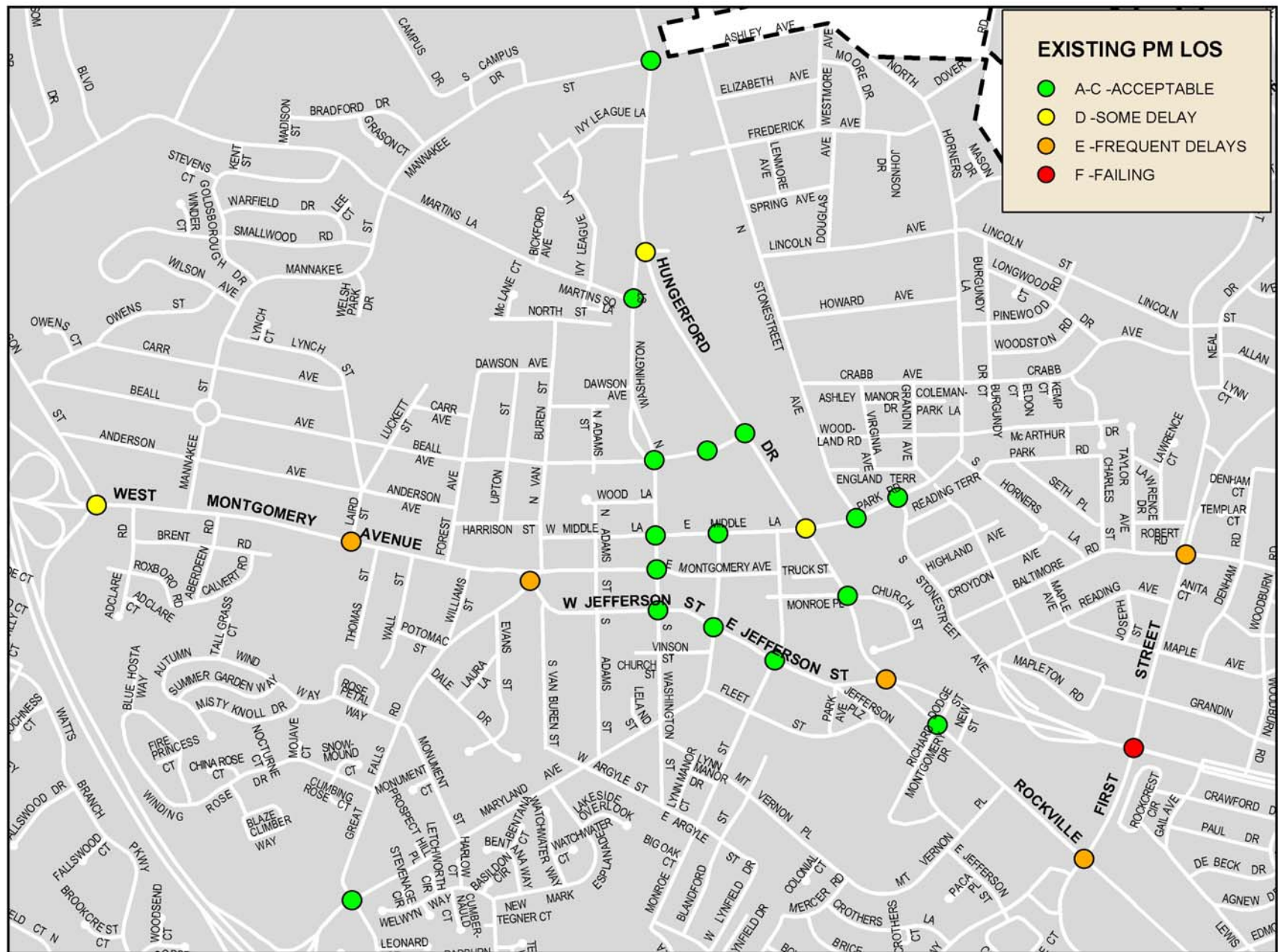


 7/10ths mile from Fixed Transit Right of Way

Existing Conditions





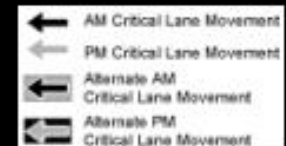
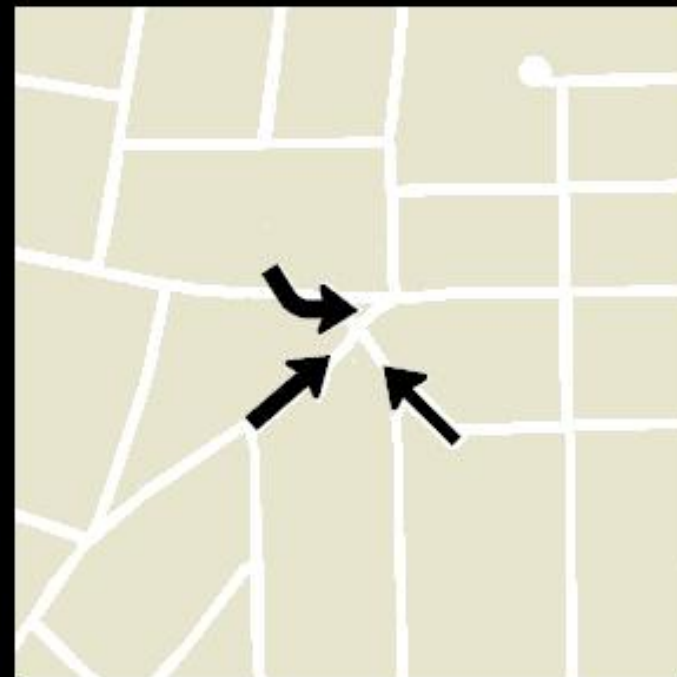


CRITICAL MOVEMENTS ON EXISTING FAILING INTERSECTIONS

VEIRS MILL RD & MD 28



W JEFFERSON ST & GREAT FALLS RD

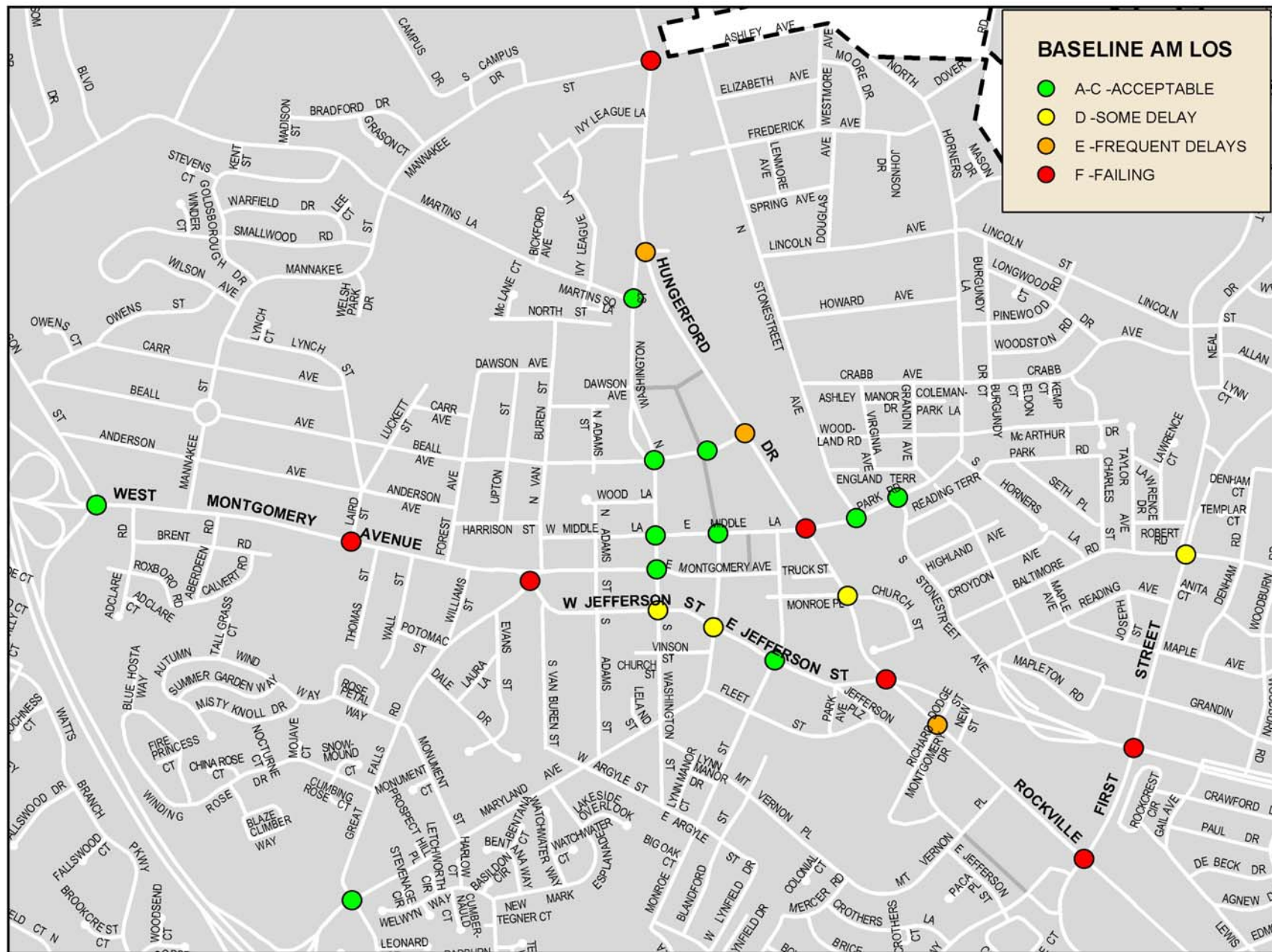


Travel Time on MD 28 from Nelson St. to First St.

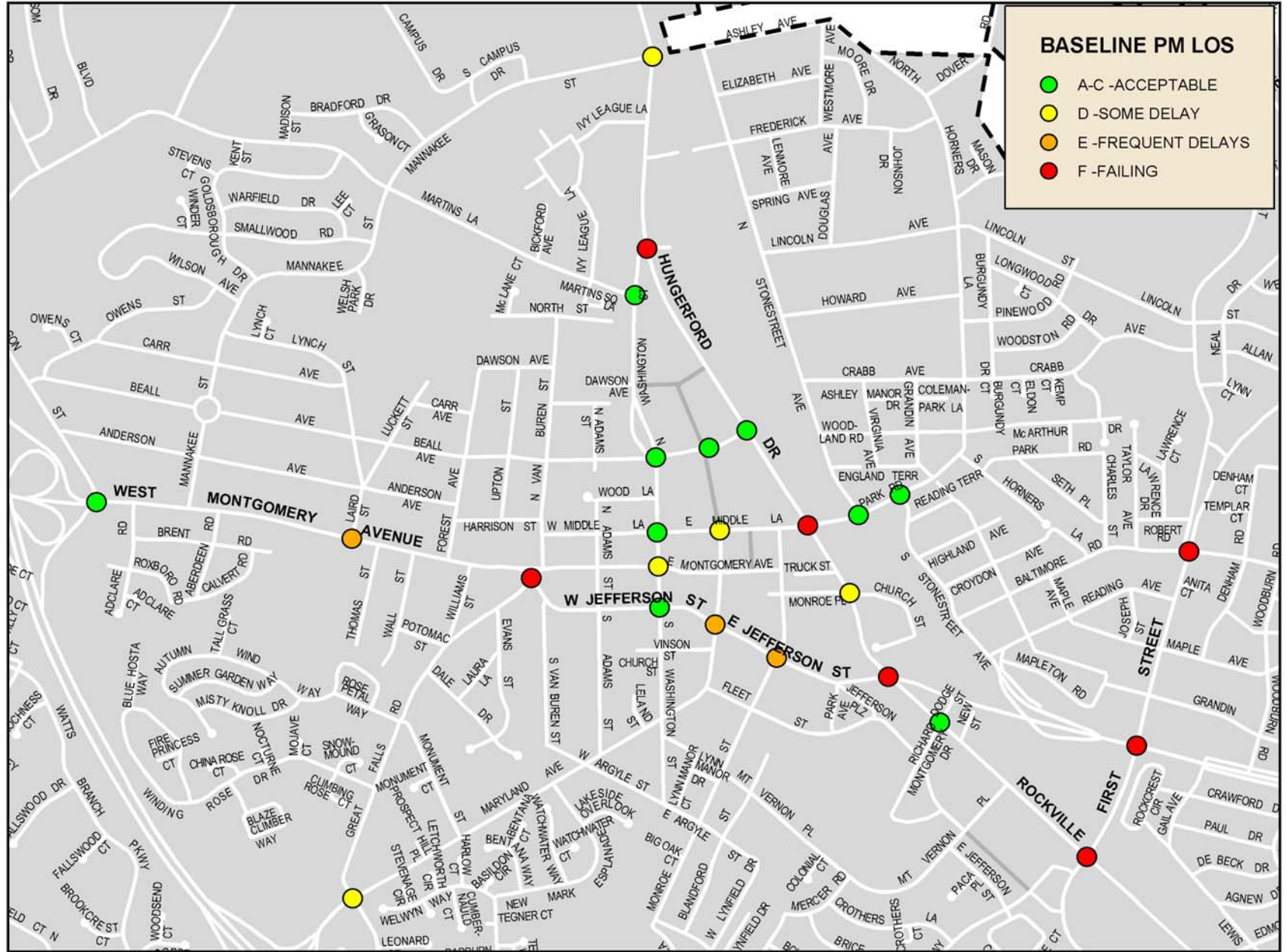
	Travel Time PM Peak (min)	
	WB	EB
Existing	9.0	8.0

Baseline





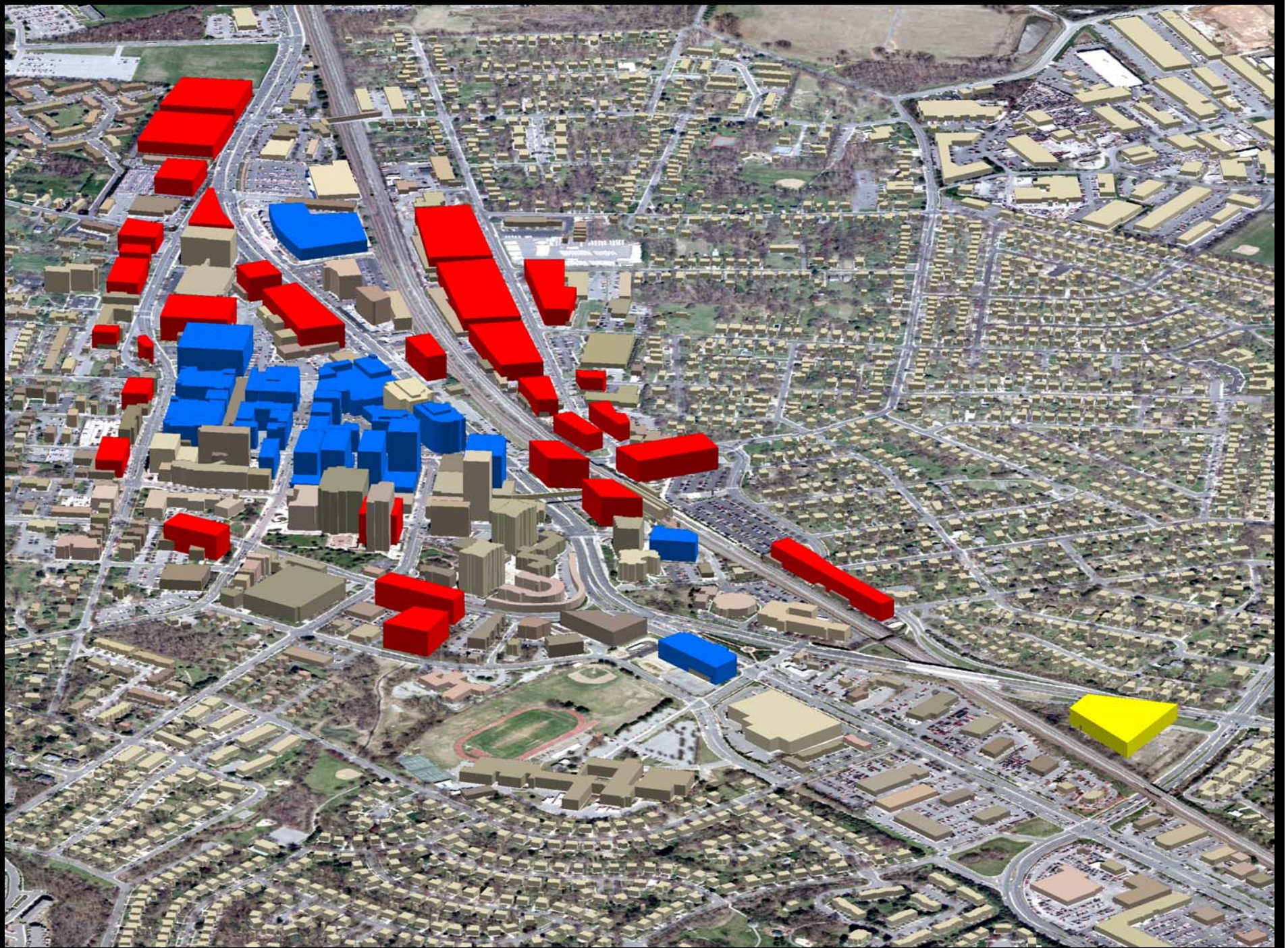
*future street alignments in darker shade



*future street alignments in darker shade

Travel Time on MD 28 from Nelson St. to First St.

	Travel Time PM Peak (min)	
	WB	EB
Existing	9.0	8.0
Baseline	12.4	24.5

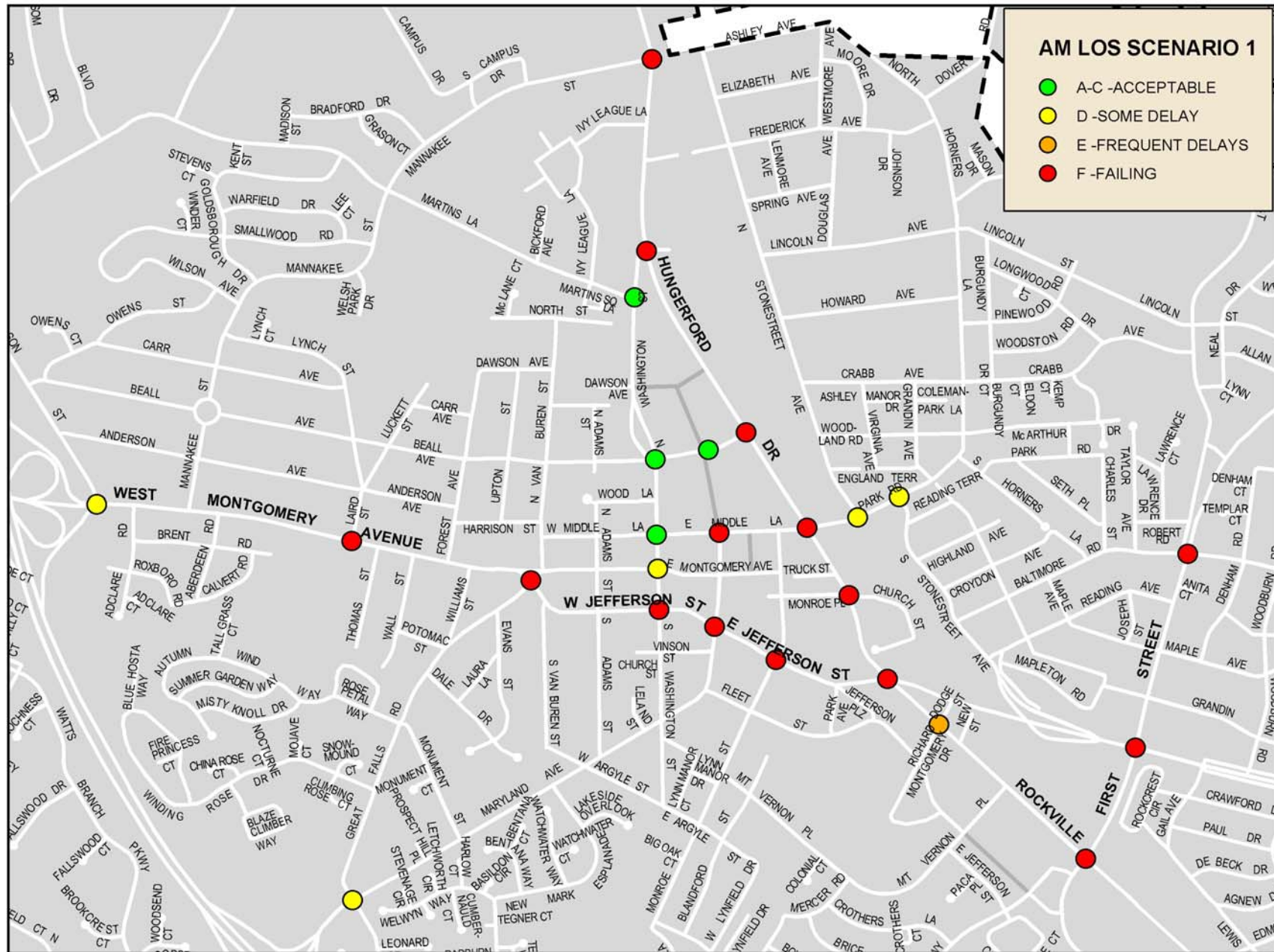


Scenario 1

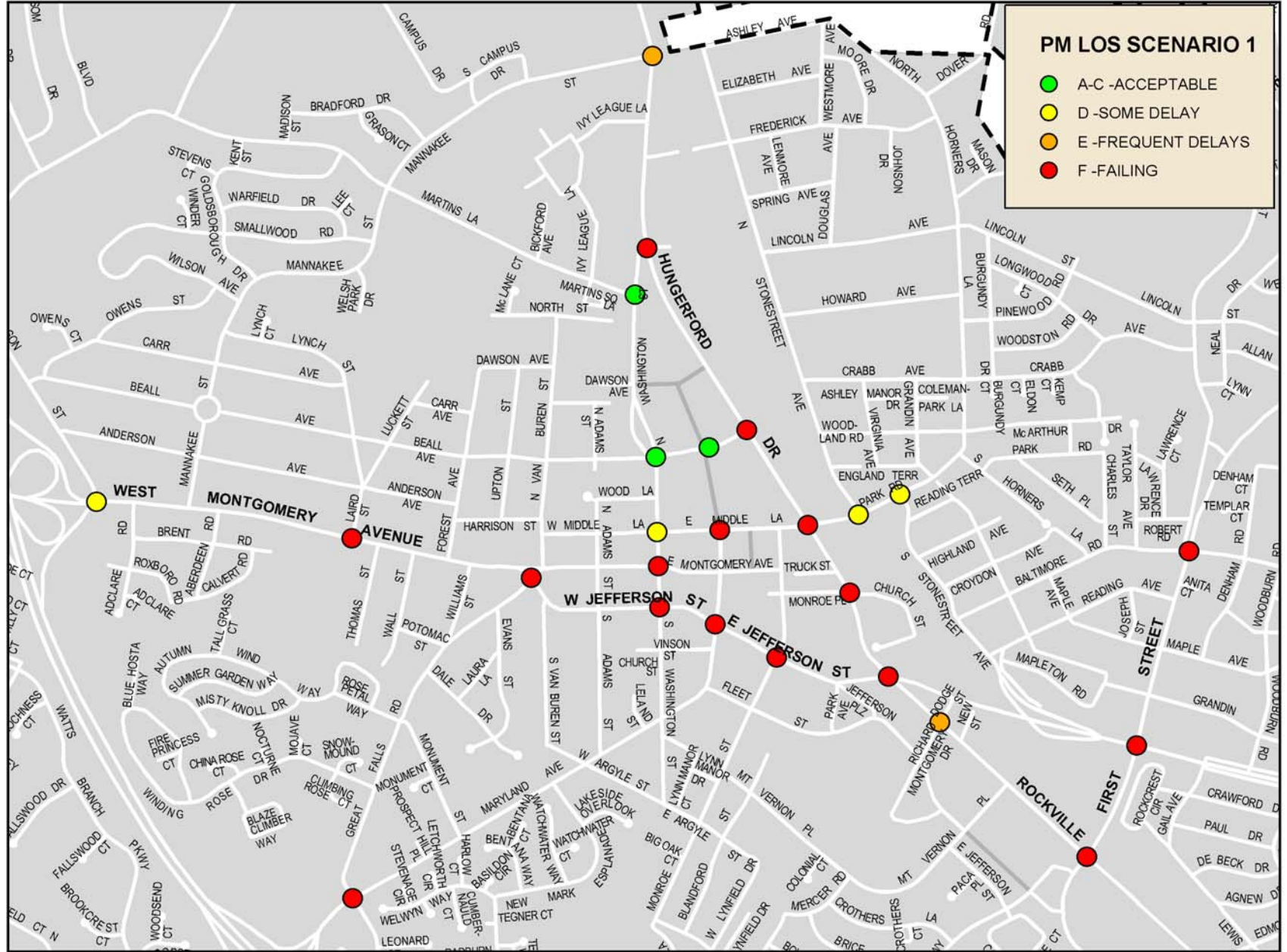
Includes:

- **All currently-approved pipeline projects**
- **Pending projects: Archstone @ First Street apartments**
- **Potential redevelopment: development/redevelopment “likely scenarios” for remaining parcels. *Does not include maximum zoning potential.***





*future street alignments in darker shade



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Travel Time on MD 28 from Nelson St. to First St.

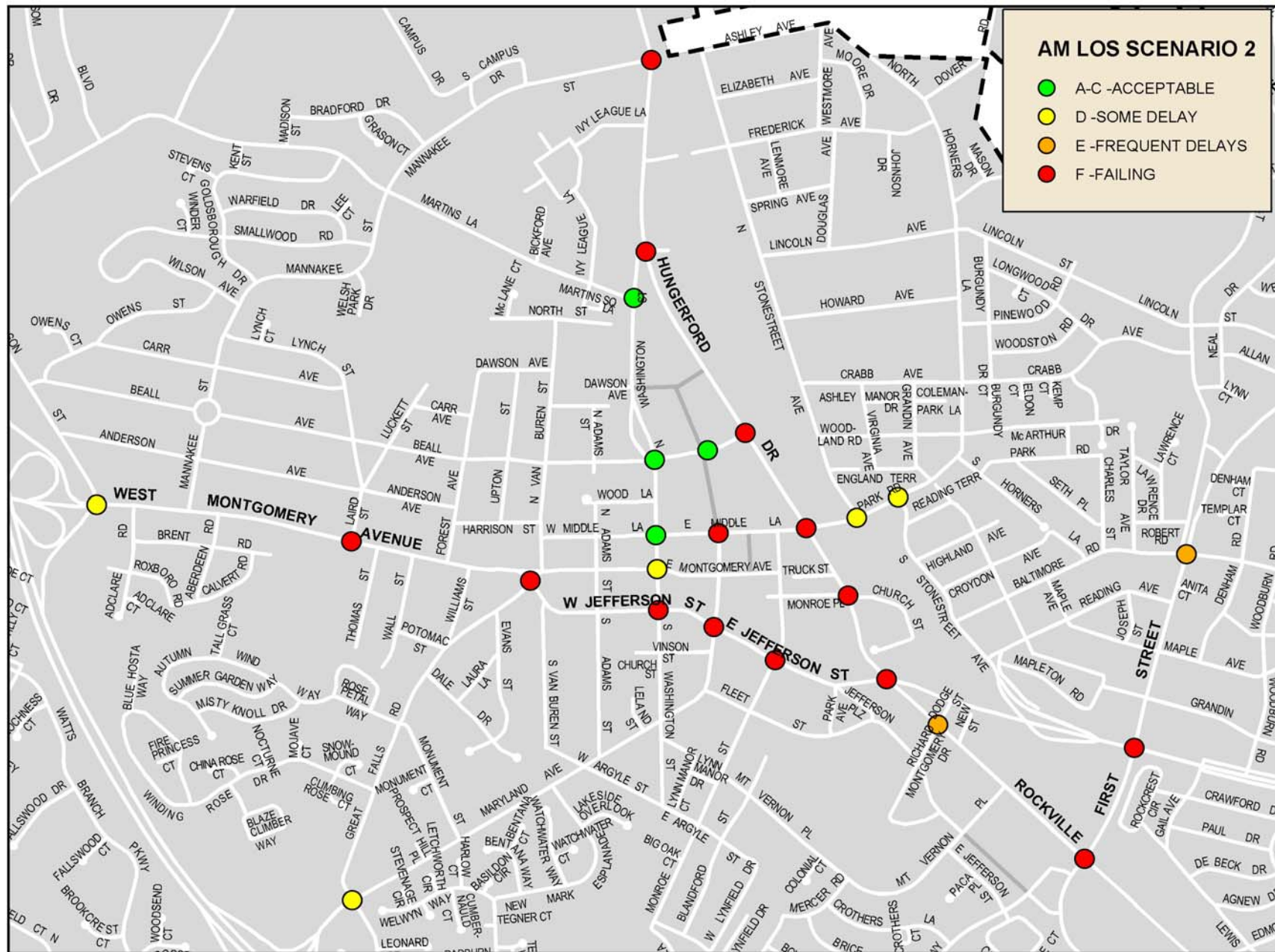
	Travel Time PM Peak (min)	
	WB	EB
Existing	9.0	8.0
Baseline	12.4	24.5
Scenario 1	18.6	25.3

Scenario 2

Includes:

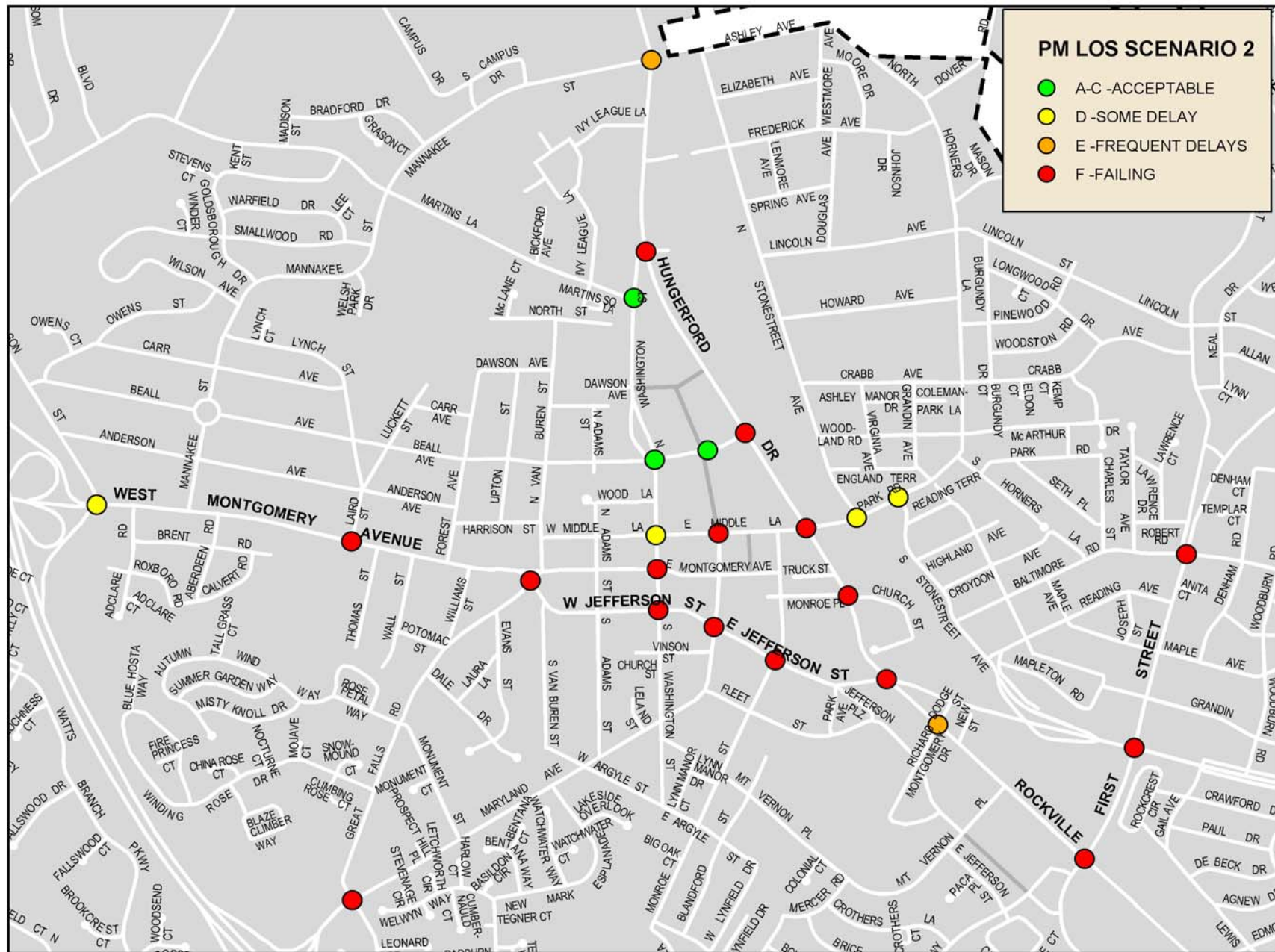
- **All currently-approved pipeline projects, with potential changes to multiple-phase developments such as Rockville Center and Rockville Metro Plaza**
- **Pending projects: Archstone @ First Street apartments**
- **Potential redevelopment: development/redevelopment “likely scenarios” of development for remaining parcels. *Does not include maximum zoning potential.***





*future street alignments in darker shade

101904 RC



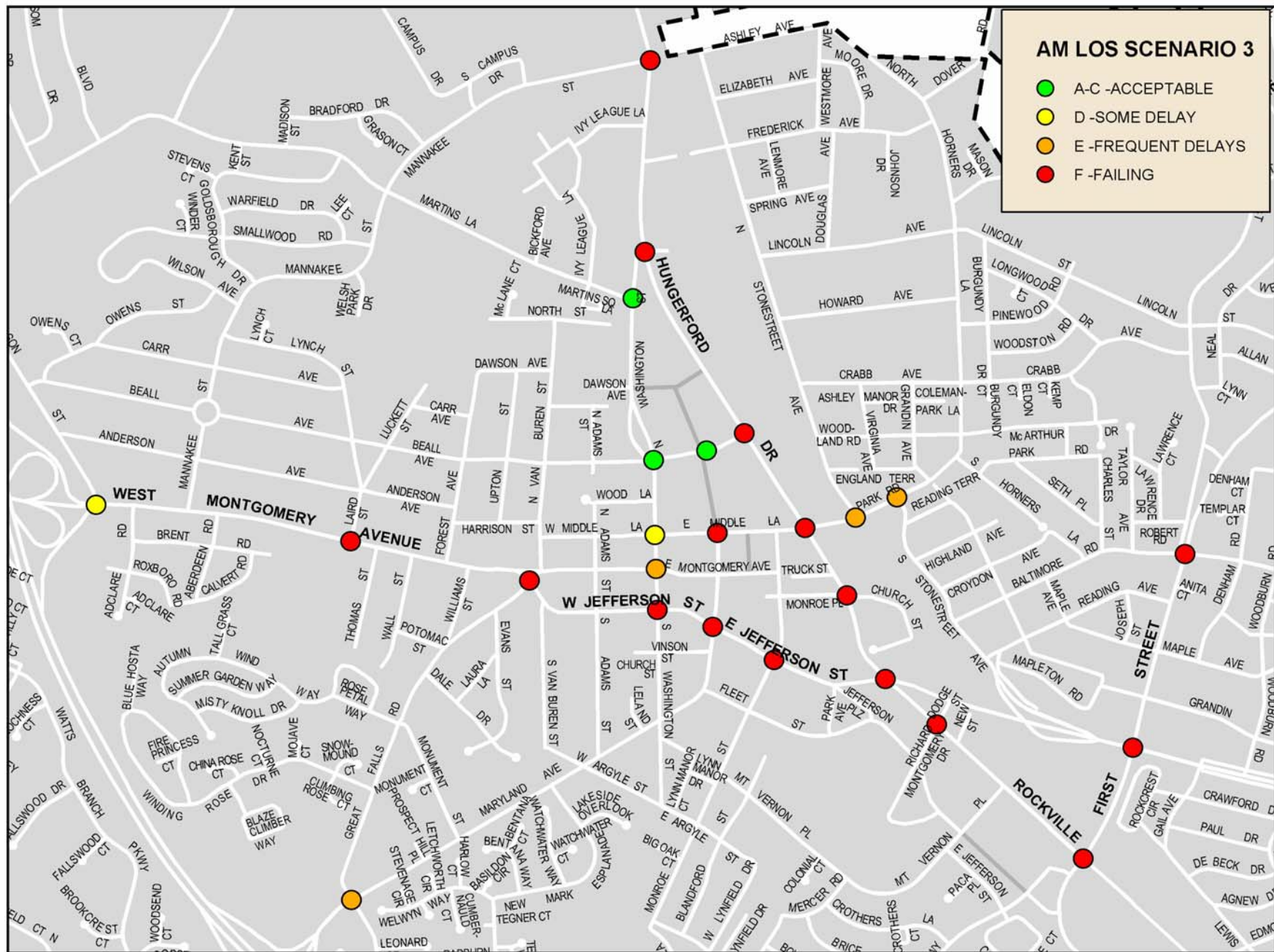
*future street alignments in darker shade

Scenario 3

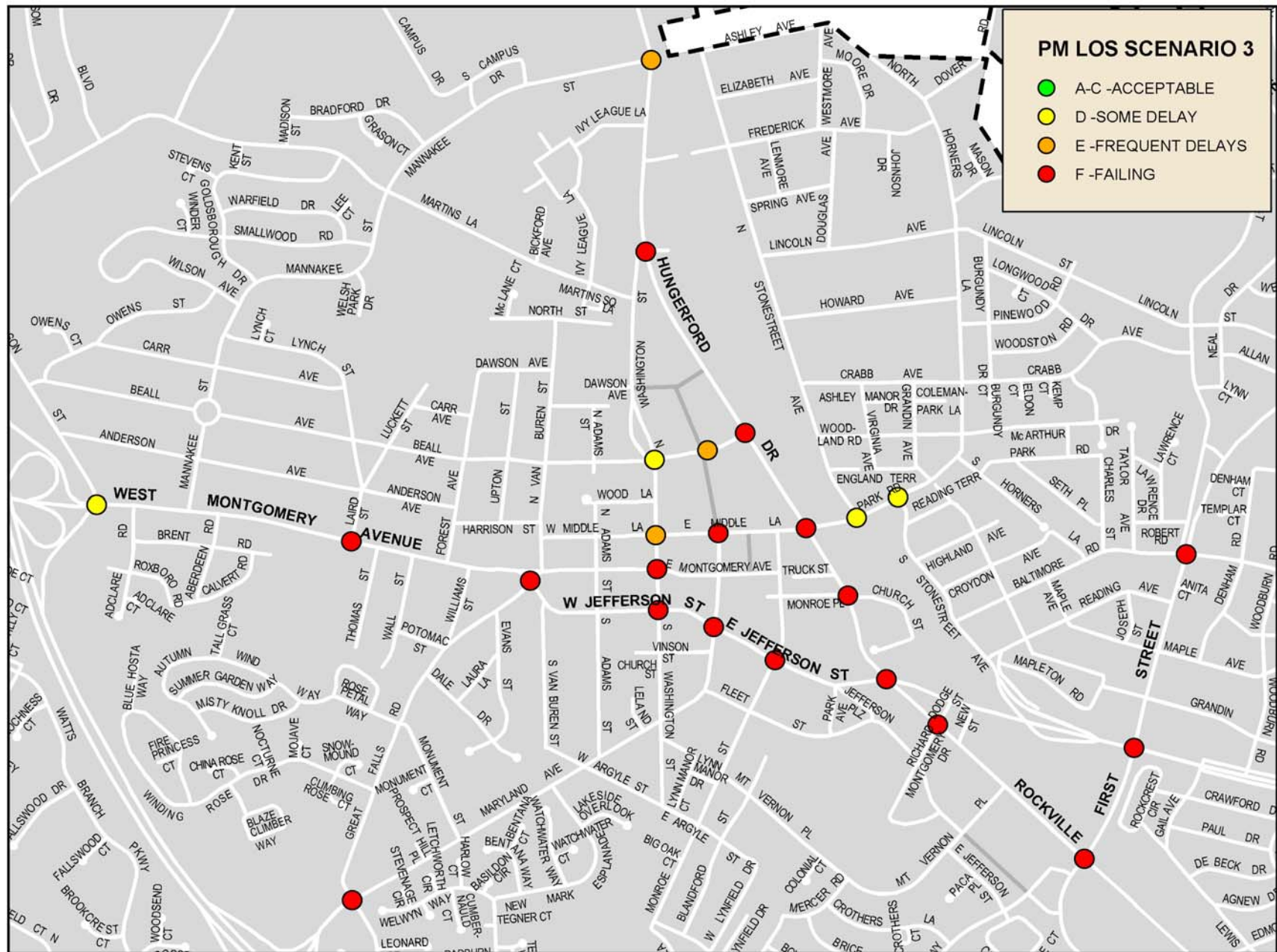
Includes:

- **All currently-approved pipeline projects, with potential changes to multiple-phase developments such as Rockville Center and Rockville Metro Plaza**
- **Pending projects: Archstone @ First Street apartments**
- **Potential redevelopment: development/redevelopment for remaining parcels at maximum zoning potential.**





*future street alignments in darker shade



*Future street alignments in darker shade

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Next Steps

Town Center Traffic Capacity Analysis

- Consultant to complete final report
- Staff to assess feasibility of improvements
- Mayor & Council to provide guidance at next worksession

